Claims

10

What is claimed is:

- 1. A system for regulating resource consumption in a computer system used for utility work and production work, the apparatus comprising:
- 5 an arrangement for determining the utilities within the system;

an arrangement for deriving a throttling level for each utility which quantifies the reduction in the rate at which the utility consumes resources; and

an arrangement for enforcing the derived throttling level for each utility.

- 2. The system according to Claim 1, wherein said arrangement for determining ascertains whether the utility has indicated its presence with the system.
 - 3. The system according to Claim 2, wherein indicating the presence of the utility within the system comprises the utility registering with a utility manager.
 - 4. The system according to Claim 2, wherein said arrangement for enforcing the throttling level is implemented within the utility.

- 5. The system according to Claim 4, wherein the throttling level is enforced through a self-imposed sleep.
- 6. The system according to Claim 4, wherein the utility is a multi-process utility and the throttling level is enforced by reducing the parallelism of the multi-processes.
- 7. The system according to Claim 4, wherein the throttling level is enforced by reducing the amount of memory used by the utility.
 - 8. The system according to Claim 4, wherein the throttling level is enforced by changing the granularity of locking.
- 9. The system according to Claim 4, wherein the throttling level is enforced byreducing the amount of processing accomplished by the utility.
 - 10. The system according to Claim 2, wherein said arrangement for enforcing the throttling level is implemented by an agent external to the utility.
 - 11. The system according to Claim 9, wherein the throttling level is enforced by reducing the operating system priority of the utility.
 - 12. A method for regulating resource consumption in a computer system used for utility work and production work, the method comprising the steps of:

15

determining the utilities within the system;

deriving a throttling level for each utility which quantifies the reduction in the rate at which the utility is processed or otherwise consumes resources; and

enforcing the derived throttling level for each utility.

- 5 13. The method according to Claim 12, wherein said determining step comprises ascertaining whether the utility has indicated its presence with the system.
 - 14. The method according to Claim 13, wherein indicating the presence of the utility within the system comprises the utility registering with a utility manager.
- 15. The method according to Claim 13, wherein said enforcing step comprises thethrottling level being implemented within the utility.
 - 16. The method according to Claim 15, wherein the throttling level is enforced through a self-imposed sleep.
- 17. The method according to Claim 15, wherein the utility is a multi-process
 utility and the throttling level is enforced by reducing the parallelism of the multiprocesses.

- 18. The method according to Claim 15, wherein the throttling level is enforced by reducing the amount of memory used by the utility.
- 19. The method according to Claim 15, wherein the throttling level is enforced by changing the granularity of locking.
- 5 20. The method according to Claim 15, wherein the throttling level is enforced by reducing the amount of processing accomplished by the utility.
 - 21. The method according to Claim 13, wherein said enforcing step is accomplished by having an agent external to the utility implement the throttling level.
- 22. The method according to Claim 21, wherein the throttling level is enforced bylowering the operating system priority of the utility.
 - 23. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for regulating resource consumption in a computer system used for utility work and production work, the method comprising, said method comprising the steps of:
- determining the utilities within the system;

deriving a throttling level for each utility which quantifies the reduction in the rate at which the utility consumes resources; and

enforcing the derived throttling level for each utility.